

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (currently amended): A service management apparatus for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, the said service management apparatus comprising:

test means for executing a process of a trial use of one of the various services provided by ~~said apparatus~~ one of the plurality of apparatuses, wherein, in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

renewal means for renewing the managed service information based on the quality evaluated by said evaluation means.

2. (original): A service management apparatus according to claim 1, wherein said evaluation means evaluates the result of the trial use of the service executed by said test means by a predetermined evaluation function.

3. (original): A service management apparatus according to claim 2, wherein said renewal means deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

4. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

5. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

6. (currently amended): A service management apparatus according to claim 1, wherein:

said test means executes an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and
said evaluation means evaluates the quality of the storage service based on the result of the access process performed by said test means.

7. (currently amended): A service management apparatus according to claim 1, wherein said evaluation means detects the number of colors or recording sheets

available in ~~the~~ an imaging service and evaluates the quality of the service based on the number of colors or recording sheets available in the service.

8. (currently amended): A service management apparatus according to claim 1, wherein the ~~plural~~ plurality of apparatuses includes a printer.

9. (currently amended): An apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said apparatus comprising:

test means for executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

deletion means for instructing, in a case the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

10. (currently amended): An apparatus connected to a service management apparatus for managing service information of various services present on a network

system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said apparatus comprising:

test means for executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

substitution means for instructing, in a case the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to substitute the service provided by the another apparatus with a service provided by said apparatus.

11. (currently amended): A service management method for use in a network system capable of providing various services dispersed in plural a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said the service management method comprising:

a test step of executing a process of a trial use of one of the various services provided by said service management method, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a renewal step of renewing the managed service information based on the quality evaluated in said evaluation step.

12. (original): A service management method according to claim 11, wherein said evaluation step includes evaluating the result of the trial use of the service executed in said test step by a predetermined evaluation function.

13. (original): A service management method according to claim 12, wherein said renewal step includes deleting the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

14. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

15. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

16. (currently amended): A service management method according to claim 11, wherein:

said test step includes executing an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said evaluation step includes evaluating the quality of the storage service based on the result of the access process performed in said test step.

17. (currently amended): A service management method according to claim 11, wherein said evaluation step includes detecting the number of colors or recording sheets available in ~~the~~ an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

18. (currently amended): A service management method according to claim 11, wherein the plural plurality of apparatuses includes a printer.

19. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said method comprising:

a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a deletion step of instructing, in a case the quality evaluated in said evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

20. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said method comprising:

a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a substitution step of instructing, in a case the quality evaluated in said evaluation step does not meet a predetermined reference, the service management apparatus to substitute the service provided by the another apparatus with a service provided by said apparatus.

21. (currently amended): A computer readable storage medium storing a program for executing a service management method for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of one of the various services provided by said apparatus, wherein in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based on the quality evaluated by said code for an evaluation step.

22. (original): A computer readable storage medium according to claim 21, wherein said code for an evaluation step evaluates the result of the trial use of the service executed by said code for a test step by a predetermined evaluation function.

23. (original): A computer readable storage medium according to claim 22, wherein said code for a renewal step deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

24. (original): A computer readable storage medium according to claim 22, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

25. (original): A computer readable storage medium according to claim 22, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

26. (currently amended): A computer readable storage medium according to claim 21, wherein:

said code for a test step executes an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said code for an evaluation step evaluates the quality of the storage service based on the result of the access process performed by said test means.

27. (currently amended): A computer readable storage medium according to claim 21, wherein said code for an evaluation step detects the number of colors or recording sheets available in ~~the~~ an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

28. (currently amended): A computer readable storage medium according to claim 21, wherein the plural-plurality of apparatuses includes a printer.

29. (currently amended): A computer readable storage medium storing a program executing a method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said apparatus comprising:

code for a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a deletion step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

30. (currently amended): A computer readable storage medium storing a program executing a method for use in a[[n]] first apparatus connected to a service management apparatus for managing service information of various services present on a

network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said apparatus program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of said the first apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a substitution step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to substitute the service provided by the [[an]]other apparatus with a service provided by said the first apparatus.

31. (currently amended): A computer program executing a service management method for use in a network system capable of providing various services dispersed in plural a plurality of apparatuses, managing service information of various services present on the network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of one of the various services provided by the service management method, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based on the quality evaluated by said code for an evaluation step.

32. (original): A computer program according to claim 31, wherein said code for an evaluation step evaluates the result of the trial use of the service executed by said code for a test step by a predetermined evaluation function.

33. (original): A computer program according to claim 32, wherein said code for a renewal step deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

34. (original): A computer program according to claim 32, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

35. (original): A computer program according to claim 32, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

36. (currently amended): A computer program according to claim 31,
wherein:

said code for a test step executes an access process for writing data to a
storage service and reading data from the storage service on a trial basis ~~for a storage~~
~~service~~; and

said code for an evaluation step evaluates the quality of the storage service
based on the result of the access process performed by said code for a test step.

37. (currently amended): A computer program according to claim 31,
wherein said code for an evaluation step detects the number of colors or recording sheets
available in ~~the~~ an imaging service and evaluates the quality of the imaging service based
on the number of colors or recording sheets available in the imaging service.

38. (currently amended): A computer program according to claim 31,
wherein the plural plurality of apparatuses includes a printer.

39. (currently amended): A computer program executing a method for use
in an apparatus connected to a service management apparatus for managing service
information of various services present on a network system and transferring the managed
service information to an external apparatus in response to a request from ~~an~~ the external
apparatus, said program comprising:

code for a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a deletion step for instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

40. (currently amended): A computer program executing a method for use in a[[n]] first apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from an the external apparatus, said program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of said the first apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a substitution step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service

management apparatus to substitute the service provided by the [[a]]nother apparatus with a service provided by said the first apparatus.

41. (new): A service management apparatus according to claim 1, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

42. (new): A service management apparatus according to claim 9, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

43. (new): A service management apparatus according to claim 10, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

44. (new): A service management method according to claim 11, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

45. (new): A service management method according to claim 19, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

46. (new): A service management method according to claim 20, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

47. (new): A computer readable storage medium according to claim 21, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

48. (new): A computer readable storage medium according to claim 29, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

49. (new): A computer readable storage medium according to claim 30, wherein said code for a test step includes, in the trial use, sending a service request to the

one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

50. (new): A computer program according to claim 31, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

51. (new): A computer program according to claim 39, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

52. (new): A computer program according to claim 40, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.